(FILE 'HOME' ENTERED AT 11:26:35 ON 12 OCT 2001)

FILE 'CAPLUS' ENTERED AT 11:27:49 ON 12 OCT 2001

L1	33	S	PANCREATIC (P) MATRIGEL
L2	521	S	EHS
L3	0	S	L2 AND L1
L4	0	S	DUCTAL SAME MATRIGEL
L5	64470	S	STEM OR PLUROPOTENT AND PROGENITOR
L6	0	S	L1 AND L5
L7	7	S	ISLETS (P)MATRIGEL

FILE 'MEDLINE' ENTERED AT 11:37:06 ON 12 OCT 2001

L8	0	S	DUCTAL SAME MATRIGEL
L9	21	S	DUCTAL (P) MATRIGEL
L10	26334	S	ISLETS
L11	4	S	L9 AND L10

DB Name	Query	Hit Count	Set Name
USPT	pancreas same matrigel	4	L20
USPT	pancreatic same matrigel	0	L19
USPT	pancreatic stem same matrigel	0	L18
USPT	l15 and l16	2	L17
USPT	ductal or pancreatic ot pancreas or islets	3311	L16
USPT	(stem or progenitor or multipotent) same (matrigel or EHS)	30	L15
USPT	islets same matrigel	5	L14
USPT	(pancrea$ or ductal or exocrine) same matrigel	5	L13
USPT	(pancrea$ or ductal or exocrine) same engelbreth holm swarm	0	L12
USPT	(pancreas and engelbreth holm swarm).ab.	0	L11
USPT	(pancreas and engelbreth holm swarm).clm.	0	L10
USPT	pancreas and engelbreth holm swarm	24	L9
USPT	pancreas same engelbreth holm swarm	0	L8
PGPB,JPAB,EPAB,DWPI	pancreas and engelbreth holm swarm	1	L7
PGPB,JPAB,EPAB,DWPI	ductal and engelbreth holm swarm	0	L6
USPT	ductal and engelbreth holm swarm	5	L5
USPT	ductal and (ehs or engelbreth holm swarm)	13	L4
USPT	ductal same (ehs or engelbreth holm swarm)	0	L3
PGPB,JPAB,EPAB,DWPI	ductal same matrigel	0	L2
USPT	ductal same matrigel	1	L1

L9 ANSWER 21 OF 21 MEDLINE

AB Monolayers of cultured epithelial cells have been prepared from fragments of guinea pig pancreatic excretory ducts isolated by a simple procedure employing collagenase digestion and manual selection, through which virtually all of the **ductal** system can be recovered. The isolated fragments were cultured in enriched Waymouth's medium on extracellular matrices of various composition and thickness, including: thin (less than 5 micron) and thick (0.5 mm) layers of rat tail collagen; thin layers of human placental collagen; thin layers of **Matrigel** (a reconstituted basement membrane material); uncoated tissue culture plastic; and the cellulose ester membranes of Millipore Millicells. Cells spread rapidly from duct fragments cultured on uncoated plastic or on plastic coated with thin layers of rat tail collagen or human placental collagen and formed epithelial monolayers. However, these cells were squamous and lacked the abundant basolateral membrane amplification and apical microvilli characteristic of freshly isolated duct epithelial cells. Cells did not spread from duct fragments cultured on **Matrigel**. In contrast, when fragments of pancreatic ducts were explanted onto either a thick layer of rat tail collagen or onto Millicell membranes, cells readily spread and formed confluent monolayers of cuboidal epithelial cells characterized by abundant mitochondria, apical microvilli, and basolateral plasma membrane elaboration. These results demonstrate that different forms of extracellular matrix modulate the growth and differentiation of pancreatic duct epithelial cells, and that culture on a permeable substrate markedly enhances the maintenance of differentiated characteristics in this cell type. The monolayers formed on Millicell membranes should provide a useful model system for physiologic analysis of the regulation of electrolyte secretion by this epithelium.

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